IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	10/553,519	Confirmation No.	:	1658
Applicants	:	Georg DUDA et al.			
Filed	:	August 1, 2006			
Title	:	**Method for Simulating Musculoskeletal Strains on a Patient**			
Group Art Unit	:	3736			
Examiner	:	Sean Patrick DOUGHERTY			
Customer No.	:	28289			

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

DECLARATION UNDER 37 C.F.R. § 1.132

I, Ingrid Südhoff, hereby declare as follows:

1. I am a citizen and resident of Germany and am Workflow Manager in the Hip Navigation division of Aesculap AG, a company focusing on products and services for core processes in surgery. In my current employment, I am responsible for Total Hip Arthroplasty products involving software and hardware solutions.

2. I have a Ph.D. in biomechanics with emphasis on geometric and mechanical modeling of the lower limbs, which includes development, implementation, and validation of methods to use medical imaging to enhance gait analysis and model the 3D geometry of bones and muscles. Other biomechanic experience includes a Master Thesis with emphasis on attachment systems used in gait analysis.

3. As being considered a person having ordinary skill in the art of biomechanics, I hereby attest that the term "musculoskeletal" in the anatomical and surgical arts encompasses bones, muscles, cartilage, tendons, ligaments, joints, and/or connective tissue. I also attest that the term "musculoskeletal strain" in the anatomical and surgical arts encompasses stretching in any of the aforementioned components of the musculoskeletal system that is subject to that strain. Additionally, I attest that it is common and accepted knowledge in the anatomical and surgical arts that any excessive strain to the musculoskeletal system inherently results in injury, weakening, or overexertion of a joint or tissue of the system. Furthermore, I attest that it is common and accepted knowledge in the anatomical

and surgical arts that any reference to "strains" in the context of musculoskeletal strains is strictly interpreted to mean Forces and Moments acting on the musculoskeletal system.

4. As being considered a person having ordinary skill in the art of surgical interventions, I have an understanding of the teachings in U.S. Patent No. 6,205,411 to DiGioia, III et al. After review of the DiGioia patent, I do not view this reference to contain any disclosure with respect to computing individual musculoskeletal strains and to use musculoskeletal reference strains, which are stored in a database.

5. I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Ingrid Südhoff, Ph.D.

16.12.2009
Date